

03050105-13

(*South Pacolet River/Lake Bowen*)

General Description

Watershed 03050105-13 (formerly 03050105-160) is located in Spartanburg County and consists primarily of the *South Pacolet River* and its tributaries. The watershed occupies 58,529 acres of the Piedmont region of South Carolina. Land use/land cover in the watershed includes: 48.9% forested land, 31.5% agricultural land, 12.4% urban land, 3.7% water, 2.1% forested wetland, 0.9% scrub/shrub land, and 0.5% barren land.

The South Pacolet River originates near Glassy Mountain and accepts drainage from Green Creek, Belue Creek, Jamison Mill Creek, Spivey Creek (Clear Branch), and Motlow Creek (Easley Creek, Holston Creek) before forming Lake Bowen (Alexander Creek, Turkey Creek). The South Pacolet River flows out of Lake Bowen to then form the South Pacolet River Reservoir #1 (Mud Creek) which is also known as Spartanburg Reservoir #1. There are a total of 100.5 stream miles and 1,483.3 acres of lake waters in this watershed. With the exception of the headwaters of the South Pacolet River downstream to Hwy. 116, which is classified TN, all streams in the watershed are classified FW.

Surface Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
B-720	BIO	FW	SOUTH PACOLET RIVER AT S-42-183
B-103	S/W	FW	SPIVEY CREEK AT S-42-208, 2.5 MI SSE OF LANDRUM
B-790	BIO	FW	MOTLOW CREEK AT SR 888
B-302	S/INT	FW	SOUTH PACOLET RIVER AT S-42-866, 1 MI SE CAMPOBELLO
B-340	W	FW	LAKE BOWEN NEAR HEADWATERS, 0.4 KM W OF S-42-37
B-339	W/INT	FW	LAKE BOWEN IN FOREBAY NEAR DAM
B-113	S/W	FW	SPARTANBURG RESERVOIR #1 ON S-42-213 NE OF INMA

South Pacolet River - There are two SCDHEC monitoring stations along the South Pacolet River. At the upstream site (**B-720**), aquatic life uses are fully supported based on macroinvertebrate community data. Aquatic life uses are fully supported at the downstream site (**B-302**), and significant decreasing trends in turbidity and total phosphorus concentration suggest improving conditions for these parameters. A very high concentration of cadmium was measured in the 2003 sediment sample. Recreational uses are partially supported at this site due to fecal coliform bacteria excursions.

Spivey Creek (B-103) – Aquatic life uses are fully supported and a significant decreasing trend in turbidity suggests improving conditions for this parameter. Recreational uses are partially supported due to fecal coliform bacteria excursions.

Motlow Creek (B-790) – Aquatic life uses are partially supported based on macroinvertebrate community data.

Lake Bowen – There are two SCDHEC monitoring stations along Lake Bowen. At the uplake site (**B-340**), aquatic life and recreational uses are fully supported. At the downlake site (**B-339**), aquatic life uses are fully supported; however, there are significant increasing trends in five-day biochemical oxygen demand, turbidity, total phosphorus concentration, and total nitrogen concentration. There is a significant decreasing trend in pH. Recreational uses are fully supported at this site; however, there is a significant increasing trend in fecal coliform bacteria concentration. *Fish tissue samples from Lake Bowen indicate no advisories are needed at this time.*

Spartanburg Reservoir #1 (B-113) - Aquatic life and recreational uses are fully supported and significant decreasing trends in five-day biochemical oxygen demand and turbidity suggest improving conditions for these parameters.

NPDES Program

Active NPDES Facilities

<i>RECEIVING STREAM FACILITY NAME PERMITTED FLOW @ PIPE (MGD)</i>	<i>NPDES# TYPE COMMENT</i>
MOTLOW CREEK LINKS O TRYON GOLF COMMUNITY PIPE #: 001 FLOW: 0.024	SC0042684 MINOR DOMESTIC
SOUTH PACOLET RIVER SPARTANBURG WATER SYSTEM WWTP/SIMMS WWTP PIPE #: 001 FLOW: 0.012 (PHASE II)	SC0030279 MINOR DOMESTIC
SOUTH PACOLET RIVER SPARTANBURG WATER SYSTEM/SIMMS WTP PIPE #: 001 FLOW: 1.17	SCG643002 MINOR DOMESTIC
SOUTH PACOLET RIVER LITTLE ACRES SAND CO./S.PACOLET MINE PIPE #: 001 FLOW: M/R	SCG730178 MINOR INDUSTRIAL
SPIVEY CREEK CITY OF LANDRUM/WTP PIPE #: 001 FLOW: 0.032	SCG645029 MINOR DOMESTIC

Nonpoint Source Management Program

Land Disposal Activities

Landfill Facilities

<i>LANDFILL NAME FACILITY TYPE</i>	<i>PERMIT # STATUS</i>
POTEAT SHORT TERM C&D LANDFILL C&D LANDFILL	422903-1301 -----

Land Application Sites

<i>LAND APPLICATION SYSTEM FACILITY NAME</i>	<i>ND# TYPE</i>
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SPRAYFIELD
CAMPOBELLO-GRAMBLING SCHOOL

ND0067342
DOMESTIC

Mining Activities

***MINING COMPANY
MINE NAME***

***PERMIT #
MINERAL***

LITTLE ACRES SAND CO.
SOUTH PACOLET RIVER MINE

0805-83
SAND

VM HENSON & BOBBY JENKINS
BIRD MOUNTAIN MINE

1337-83
TOPSOIL

TIM BELUE
BELUE MINE

1379-83
SAND; SAND/CLAY

Water Quantity

***WATER USER
STREAM***

***REGULATED CAP.(MGD)
PUMPING CAP. (MGD)***

SPARTANBURG WATER SYSTEM
SOUTH PACOLET RIVER RES.#1

64.0

Growth Potential

There is a low to moderate potential for growth in this watershed, which contains the Town of Campobello and a portion of the City of Landrum. I-26 bisects the watershed and some growth may result around interstate interchanges.

Watershed Protection and Restoration Strategies

Total Maximum Daily Loads (TMDLs)

TMDLs were developed for SCDHEC and approved by EPA for fecal coliform bacteria in the **South Pacolet River** at water quality monitoring sites **B-302** and **B-113**. Currently Links Water LLC (SC0042684) operates one small WWTP on Motlow Creek a tributary of the river. The South Pacolet River watershed is partly within a Municipal Separate Storm Sewer System (MS4) designated area: Greenville County. Possible sources of fecal coliform bacteria into the South Pacolet River include MS4 runoff, cattle in creeks, failing onsite wastewater disposal systems, pets, and wildlife. The TMDL specifies reductions in the load of fecal coliform bacteria into the South Pacolet River of 68% (B-302) in order for the river to meet the recreational use standard. No reduction is cited for B-113.

A TMDL was developed for SCDHEC and approved by EPA for fecal coliform bacteria in **Spivey Creek** at water quality monitoring site **B-103**. No currently active facilities that have fecal coliform limits in their NPDES permits discharge into the creek. The watershed is not within a MS4 designated area. Possible sources of fecal coliform bacteria in Spivey Creek include failing onsite wastewater disposal systems, urban residential runoff, leaking sewers, pets, and wildlife. The TMDL specifies a reduction in the load of fecal coliform bacteria into Spivey Creek of 59% in order for the creek to meet the recreational use standard.